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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,629

07/01/2005

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EXAMINER

EOFF, ANCA

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/531,629	<b>Applicant(s)</b> LOCCUFIER ET AL.	
	<b>Examiner</b> ANCA EOFF	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11,13,15-18,20-23 and 25-37 is/are pending in the application.
- 4a) Of the above claim(s) 4-6,16-18,20-23,26-29 and 32-34 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,8-11,13 and 35-37 is/are allowed.
- 6) ☒ Claim(s) 2,3,15,25,30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The foreign priority document EPO 02102445.0 filed on October 15, 2002 was received and acknowledged.

### ***Claim Status***

2. The elected specie E1-p has been searched. The specie is not found in the prior art and is considered to the allowable subject matter.

Claims 1, 8-11, 13 and 35-37 are allowable. The reasons for allowance are shown in paragraph 11 of the Office Action.

The search has been extended for the remaining species and claims 2-3, 15, 20, 25 and 30-31 are rejected, as shown in paragraphs 3-4 and 6-9 of the Office Action.

Claims 4-6, 16-18, 21-23, 26-28 and 32-34 remain withdrawn as being drawn to non-elected species. However, the applicant should note that claims 4-6 are ultimately dependent on claim 1 but the formulas in claims 4-6 are not included in claim 1. Also, claims 16-18 are ultimately dependent on claim 9 but the formulas in claims 16-18 are not included in claim 9.

Claims 7, 12, 14, 19 and 24 are canceled.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 2-3, 15, 25 and 30-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-3 and 30-31 are dependent on claim 1 but the formulas in claims 2-3 and 30-31 are not included in claim 1.

Claims 15, 20 and 25 are dependent on claim 9 but the formulas in claims 15, 20, 25 are not included in claim 9.

5. Claim 29 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 is dependent on claim 19, which is canceled.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

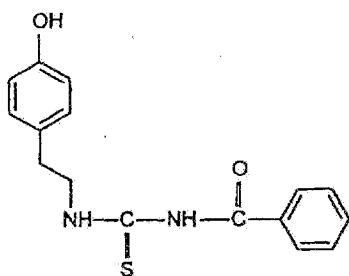
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 2-3, 15, 25 and 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Kunita et al. (EP 0 982 123).

With regard to claims 2 and 3, Kunita discloses an image recording material or photosensitive composition comprising (A-1) a phenolic polymer having a structural unit represented by the formula (I) on a polymer backbone:

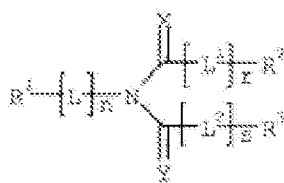
wherein R<sup>1</sup> is a hydrogen atom, n=0, X and Y are oxygen atoms, s=0 and R<sup>3</sup> is a terminal phenyl group, L<sup>1</sup> is -NH-CH<sub>2</sub>-CH<sub>2</sub>- linking group, r=1 and R<sup>2</sup> is the phenolic monomeric unit.

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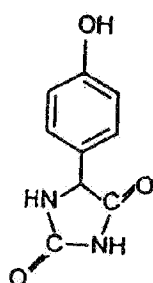


(III) (compound (S-3 in par.0041).

This monomer meets the limitations of claim 2 for a phenolic monomer having a substituent which comprises an imide group having the structure

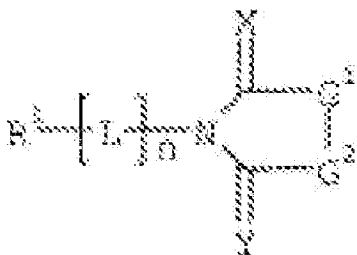


, wherein R<sup>1</sup> is a hydrogen atom, n=0, X is an oxygen atom and Y is a sulfur atom, r=0 and R<sup>2</sup> is a terminal phenyl group, L<sup>2</sup> is -NH-CH<sub>2</sub>-CH<sub>2</sub>- linking group, r=1 and R<sup>3</sup> is the phenolic monomeric unit.



(IV) (compound (S-36) in par.0041).

This monomer meets the limitations of claim 3 for a phenolic monomer having a substituent which comprises an imide group having the structure



, wherein X and Y are oxygen atoms,  $G^1$  is  $-NR^4-$ ,

$R^4$  is a hydrogen atom,  $R^1$  is a hydrogen atom,  $n=0$ ,  $G^2$  is  $R^5-(L)_t-C-(L)_u-R^6$ ,  $R^5$  is a hydrogen atom,  $R^6$  is the phenolic monomeric unit and  $t, u=0$ .

With regard to claim 15, Kunita further discloses that the image recording material or photosensitive composition are recorded using an infrared laser. Therefore, it is preferable that the recording material or composition contains an infrared ray absorbing agent (par.0125).

The image recording material is applied on a substrate (par.0170), such as an aluminum plate (par.0175). The aluminum plate may be anodized in order to enhance the water retention and wear resistance of the surface (par.0178). The aluminum plate which has been anodized may be optionally subjected to a hydrophilization treatment (par.0180). The aluminum plate substrate treated as shown above is equivalent to the support having a hydrophilic surface of the instant application.

The image recording material is applied on a substrate (par.0170) and the recording can be performed using an infrared laser (par.0185) then a developing treatment is performed immediately after exposure (par.0186).

Kunita does not clearly disclose that the image recording material constitutes the oleophilic coating of the printing plate but it is well-known in the art that, in general, a lithographic printing plate comprises an oleophilic image area capable of accepting ink

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in the process of printing and a hydrophilic non-image area capable of accepting a fountain solution. As a precursor for such a lithographic printing plate, a plate having an oleophilic photosensitive layer (ink-receptive layer) on a hydrophilic substrate has been used (Yanaka et al., US Pg-Pub 2001/0046638, par.0002).

For the printing plate of Kunita, the image recording layer constitutes the oleophilic layer and the hydrophilized aluminum plate constitutes the hydrophilic support.

With regard to claim 25, Kunita further discloses that the image recording material or the photosensitive composition can be of a negative type so compounds cross-linkable in the presence of an acid can be used (par.0156). A compound which generates an acid in the presence of heat (acid-generating agent), equivalent to the latent Bronsted acid of the instant application, can also be incorporated in the image recording material (par.0158).

With regard to claims 30 and 31, Kunita further discloses that the phenolic polymer is a novolak-type polymer having on a main and/or side chain a structural unit derived from a phenolic structure having a specific -X-Y-Z functional group (par.0022).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kunita (EP 0 982 123) in view of Urano et al. (US Pg-Pub 2002/0058207).

With regard to claim 20, Kunita discloses a printing plate comprising a hydrophilic aluminum support and a coating comprising a phenolic polymer and an ray absorbing agent as applied to claim 15 (see paragraph 4 of the Office Action) but fails to disclose that the coating/image recording layer comprises a dissolution inhibitor.

Urano et al. disclose a positive photosensitive composition comprising a novolak resin as essential component (par.0039), photo-thermal conversion material (equivalent to the infrared ray absorbing agent of Kunita) (par.0022).The composition may contain a solubility-suppressing agent which has a function of lowering the solubility of the novolak resin, for the purpose of increasing the difference in the solubility in the alkali developer between the exposed portion and the non-exposed portion. Such a solubility-suppressant agent is considered to lower the solubility of the novolak resin in the alkali developer by forming hydrogen bond with the novolak resin (par.0048).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to add the solubility-suppressing agent (dissolution inhibitor) of Urano et al. in the image recording material composition of Kunita, in order to of increasing the difference in the solubility in the alkali developer as between the exposed portion and the non-exposed portion of the novolak-type resin (Urano et al., par.0048).

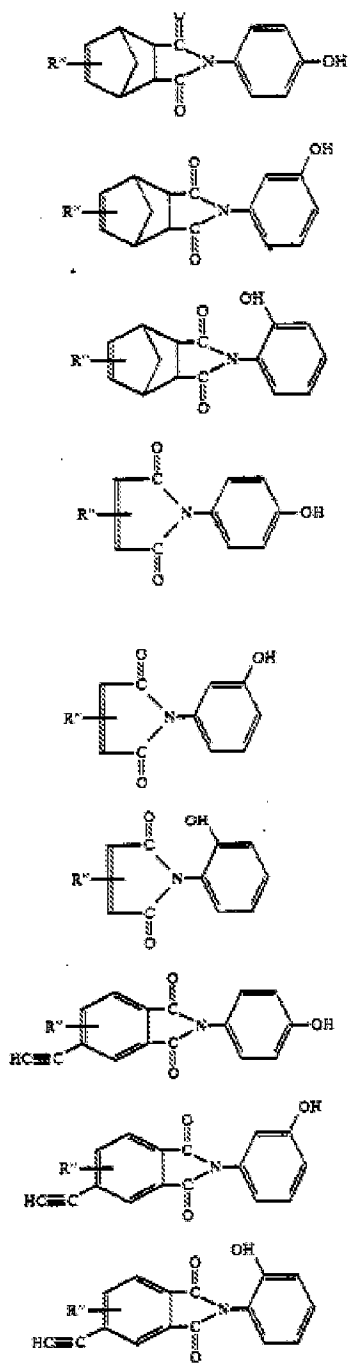
***Allowable Subject Matter***

10. Claims 1, 8-11, 13 and 35-37 are allowed.

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11. The following is a statement of reasons for the indication of allowable subject matter:

Lubowitz et al. (US Patent 4,661,604) disclose compounds having the structures:



(Table III in columns 7-8) and further teach that the –OH group is reactive and makes the condensation reaction possible (column 5, lines 47-50). Therefore, due to the fact that the hydroxylic group is reactive and contributes to the formation of the polymeric chain, the polymers of Lubowitz et al. do not comprise phenolic groups as monomeric units, as required by the instant application.

### ***Response to Arguments***

12. Applicant's argument, filed on February 15, 2008, with respect to the rejection of claims 7 and 35 under 35 USC 102(b) over Nishikawa (JP 59-157109) have been fully considered and are persuasive. The rejection of claims 7 and 35 has been withdrawn.

13. The rejection of claims 1, 8-9 and 13 under 35 USC 102(b) over Kunita et al. (EP 0 982 123) formulated in the previous Office Action is withdrawn due to applicant's amendment. However, a new rejection over Kunita et al. for the amended claims is included.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anca Eoff whose telephone number is 571-272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./

Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1795